

OM protein - nucleic search, using frame\_plus\_pzn model

Run on: November 11, 2005, 20:16:49 ; Search time 3276 Seconds

(without alignments)  
6146.520 Million cell updates/sec

Title: US-10-628-432-32

Perfect score: 2859

Sequence: 1 MSQSGSHRGRLAGRWLWGA.....DQLQDFNIPQAVYKDDDK 529

Scoring table:

BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 34239544 seqs, 19032134700 residues

Total number of hits satisfying chosen parameters: 68479088

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

-MODEL=frame+gzn.model -DEV=xlh  
-Q/cgnt\_1/USPRO.spool/US10628432/runat 03112005 080226 14137/app query.fasta\_1.711  
-DB=EST -OPMT=fastap -SUPERfix=err -MINMATCH=0.1 -LOOPEL=0 -LOOPEXT=0  
-UNITS=bits -START=1 -END=1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45  
-DOCALLIGN=200 -THR\_SCORE=pcc -THR\_MAX=100 -THR\_MIN=0 -ALIGN=20 -MODE=LOCAL  
-OUTPMT=pcc -NOR=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000  
-USRR=US10628432.0CGN 1.1 3437 @runat 03112005 080226 14137 -NCPU=6 -ICPU=3  
-NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG  
-DEV TIMEOUT=120 -MAIN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6  
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database:

EST:  
1: gb\_est1.\*  
2: gb\_est2.\*  
3: gb\_hic.\*  
4: gb\_est3.\*  
5: gb\_est4.\*  
6: gb\_est5.\*  
7: gb\_est6.\*  
8: gb\_gsa1.\*  
9: gb\_gsa2.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Match length	ID	Description
1	2805	98.1	2514 9	AY404850 Homo sapi
2	2774	97.0	2514 9	AY404851 Pan trogl
3	2460	86.0	3673 3	AY404852 Mus muscu
4	2459	86.0	2502 9	AY404853 Mus muscu
5	2447	85.6	3490 3	AK028364 Mus muscu
6	1638	57.3	3025 3	AK076295 Mus muscu
7	1362.5	47.7	845 6	CD619814 Mus muscu
8	1223	42.8	2931 3	BC003269 Mus muscu
9	1170	40.9	827 6	CD619810 Mus muscu

C	10	1154	40.4	827	6	CD619812	CD619812 56070343J
	11	1113	38.9	848	6	CB321525	CB321525 AGENCOURT
	12	1025	35.9	651	6	BY753951	BY753951 BY753951
C	13	1008	35.3	598	4	BM069515	BM069515 1e8909.x
	14	1003	33.1	681	2	BE912007	BE912007 601662774
	15	952	33.3	590	6	CD619809	CD619809 56070335H
C	16	941	32.9	602	6	CD619811	CD619811 56070343H
	17	895	31.3	763	9	CR798322	CR798322 G00AA17A
	18	885.5	31.0	882	7	CK412419	CK412419 ANP IPG11
	19	877	30.7	840	5	BU214006	BU214006 603749503
	20	854.5	29.9	932	6	CA788933	CA788933 AGENCOURT
	21	841	29.4	736	7	CF734236	CF734236 UI-M-HBO-
	22	835	29.2	531	9	CG549416	CG549416 OST152925
C	23	824.5	28.8	551	6	CB614460	CB614460 AMGNNUC:N
	24	810	28.3	643	6	CB619813	CB619813 56070453H
	25	806	28.2	719	5	BU701949	BU701949 UI-M-FIO-
	26	786	27.5	520	9	CG633232	CG633232 OST352674
	27	772.5	27.0	769	7	CO432359	CO432359 UI-M-HBO-
	28	760	26.6	1930	3	AK090358	AK090358 Mus muscu
	29	756.5	26.5	788	7	CR629695	CR629695 DKF2p469L
	30	738.5	25.8	664	7	CF170010	CF170010 B0821D01-
	31	736.5	25.8	595	6	CD623530	CD623530 5605048H
	32	734.5	25.7	743	7	CF741826	CF741826 UI-M-HBO-
	33	719	25.1	692	7	CN459174	CN459174 UI-M-HNO-
	34	709.5	24.8	580	7	CF168714	CF168714 B0803E12-
	35	709	24.8	421	5	BY218603	BY218603 BY218603
	36	702	24.6	700	4	BI691035	BI691035 603309806
	37	697.5	24.4	582	5	BP293170	BP293170 BP293170
	38	685	24.0	3583	3	AK043875	AK043875 Mus muscu
	39	684	23.9	420	2	AW553152	AW553152 34940 MAR
C	40	683	23.9	440	2	BF850604	BF850604 FMI-EN006
	41	680.5	23.8	559	5	BP293707	BP293707 BP293707
	42	663.5	23.2	580	5	BP378639	BP378639 BP378639
	43	663.5	23.2	584	5	BP267436	BP267436 BP267436
	44	663	23.2	799	7	CO247237	CO247237 AGENCOURT
	45	656	22.9	849	7	CO247095	CO247095 AGENCOURT

#### ALIGNMENTS

RESULT 1	AY404850	2514 bp	DNA	linear	GSS 16-DEC-2003
LOCUS	AY404850				
DEFINITION	Homo sapiens ADAMTS4 gene, VIRTUAL TRANSCRIPT, partial sequence,				
ACCESSION	AY404850				
VERSION	AY404850.1	GI.39760827			
KEYWORDS	GSS.				
SOURCE	Homo sapiens (human)				
ORGANISM	Homo sapiens				
REFERENCE	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.				
AUTHORS	Clark,A.G., Glanowski,S., Nielson,R., Thomas,P., Kejarival,A., Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B., Ferreira,S., Wang,G., Zheng,X.H., White,T.J., Shinsky,J.J., Adams,M.D. and Cargill,M.				
TITLE	Inferring nonneutral evolution from human-chimp-mouse orthologous gene trios				
JOURNAL	Science 302 (5652), 1960-1963 (2003)				
PUBMED	14671302				
REFERENCE	2 (bases 1 to 2514)				
AUTHORS	Clark,A.G., Glanowski,S., Nielson,R., Thomas,P., Kejarival,A., Todd,M.A., Tanenbaum,D.M., Civello,D.R., Lu,F., Murphy,B., Ferreira,S., Wang,G., Zheng,X.H., White,T.J., Shinsky,J.J., Adams,M.D. and Cargill,M.				
TITLE	Direct Submission				
JOURNAL	Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA				
COMMENT	This sequence was made by sequencing genomic exons and ordering them based on alignment.				
FEATURES	Location/Qualifiers				
source	1..2514				

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - nucleic search, using frame\_plus\_p2n model

Run on: November 11, 2005, 20:28:25 ; Search time 806 Seconds  
(without alignments)  
5427.710 Million cell updates/sec

Title: US-10-628-432-32  
Perfect score: 2859  
Sequence: 1 MSOTGSHRGRLAGRLMGA.....DQLDFNIPQAVDYKDDDK 529

Scoring table:  
BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 9794790 seqs, 413490567 residues

Total number of hits satisfying chosen parameters: 19589580

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Command line parameters:  
-MODEL=frame+ p2n.model -DEV=xlh  
-O=cgnt2\_1/USPTO.spool/US10628432/rnatc 03112005 080227\_14181/app.query.fasta\_1.711  
-DB=Published Applications NA -QFMT=fastap -SUFFIX=rnpb -MINMATCH=0.1  
-LOOPCL=0 -LOOPEXT=0 -UNITS=bites -START=1 -END=1 -MATRIX=blosum62  
-TRANS=human40.csl -LIST=45 -DOCALIGN=200 -THR SCORE=ccct -THR MAX=100  
-THR MIN=0 -ALIGN=20 -MODE=LOCAL -OUTFMT=ptc -NORM=ext -HEAPSIZE=500 -MINLEN=0  
-MAXLEN=200000000 -USER=US10628432 @CGN 1 1 480 @rnatc 03112005\_080227\_14181  
-NCPUS=6 -ICPU=3 -NO MAP -LARGEQUERY -NB5 SCORES=0 -WAIT -DSBLOCK=100  
-LONGLOG -DEV TIMEOUT=120 -WANT TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5  
-FAPEXT=6 -FAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Published Applications NA:\*

1: /cgnt2\_6/ptodata/1/pubpna/US07\_PUBCOMB.seq:\*  
2: /cgnt2\_6/ptodata/1/pubpna/US06\_PUB\_PUB.seq:\*  
3: /cgnt2\_6/ptodata/1/pubpna/US06\_PUB\_PUB.seq:\*  
4: /cgnt2\_6/ptodata/1/pubpna/US06\_PUBCOMB.seq:\*  
5: /cgnt2\_6/ptodata/1/pubpna/US07\_NEW\_PUB.seq:\*  
6: /cgnt2\_6/ptodata/1/pubpna/US07\_NEW\_PUB.seq:\*  
7: /cgnt2\_6/ptodata/1/pubpna/US08\_NEW\_PUB.seq:\*  
8: /cgnt2\_6/ptodata/1/pubpna/US08\_PUBCOMB.seq:\*  
9: /cgnt2\_6/ptodata/1/pubpna/US09\_PUBCOMB.seq:\*  
10: /cgnt2\_6/ptodata/1/pubpna/US09\_PUBCOMB.seq:\*  
11: /cgnt2\_6/ptodata/1/pubpna/US09\_PUBCOMB.seq:\*  
12: /cgnt2\_6/ptodata/1/pubpna/US09\_PUBCOMB.seq:\*  
13: /cgnt2\_6/ptodata/1/pubpna/US09\_NEW\_PUB.seq:\*  
14: /cgnt2\_6/ptodata/1/pubpna/US10\_PUBCOMB.seq:\*  
15: /cgnt2\_6/ptodata/1/pubpna/US10\_PUBCOMB.seq:\*  
16: /cgnt2\_6/ptodata/1/pubpna/US10\_PUBCOMB.seq:\*  
17: /cgnt2\_6/ptodata/1/pubpna/US10\_PUBCOMB.seq:\*  
18: /cgnt2\_6/ptodata/1/pubpna/US10\_PUBCOMB.seq:\*  
19: /cgnt2\_6/ptodata/1/pubpna/US10\_PUBCOMB.seq:\*  
20: /cgnt2\_6/ptodata/1/pubpna/US10\_PUBCOMB.seq:\*  
21: /cgnt2\_6/ptodata/1/pubpna/US10\_PUBCOMB.seq:\*  
22: /cgnt2\_6/ptodata/1/pubpna/US10\_PUBCOMB.seq:\*  
23: /cgnt2\_6/ptodata/1/pubpna/US10\_PUBCOMB.seq:\*  
24: /cgnt2\_6/ptodata/1/pubpna/US10\_NEW\_PUB.seq:\*  
25: /cgnt2\_6/ptodata/1/pubpna/US10\_NEW\_PUB.seq:\*  
26: /cgnt2\_6/ptodata/1/pubpna/US11\_NEW\_PUB.seq:\*  
27: /cgnt2\_6/ptodata/1/pubpna/US11\_NEW\_PUB.seq:\*  
28: /cgnt2\_6/ptodata/1/pubpna/US60\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2805	98.1	4192	16 US-10-247-685-1	Sequence 1, Appli
2	2804	98.1	2542	20 US-10-628-432-14	Sequence 14, Appli
3	2801	98.0	1561	19 US-10-358-283-33	Sequence 33, Appli
4	2801	98.0	1726	19 US-10-358-283-32	Sequence 32, Appli
5	2801	98.0	4307	18 US-10-191-997-121	Sequence 121, Appli
6	2801	98.0	4307	19 US-10-358-283-31	Sequence 31, Appli
7	2801	98.0	4307	20 US-10-628-432-4	Sequence 4, Appli
8	2801	98.0	4307	22 US-10-956-157-1373	Sequence 1373, Ap
9	2798	97.9	4407	10 US-09-946-374-316	Sequence 316, App
10	2798	97.9	4407	14 US-10-174-590-351	Sequence 351, App
11	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
12	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
13	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
14	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
15	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
16	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
17	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
18	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
19	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
20	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
21	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
22	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
23	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
24	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
25	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
26	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
27	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
28	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
29	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
30	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
31	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
32	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
33	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
34	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
35	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
36	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
37	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
38	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
39	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
40	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
41	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
42	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
43	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
44	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App
45	2798	97.9	4407	15 US-10-176-581-351	Sequence 351, App

## ALIGNMENTS

RESULT 1  
US-10-247-685-1  
Sequence 1, Application US/10247685  
Publication No. US20030108998A1  
GENERAL INFORMATION:  
APPLICANT: Bristol-Myers Squibb Company  
TITLE OF INVENTION: AGGRECAN DEGRADING METALLO PROTEASES  
FILE REFERENCE: DM6909D  
CURRENT APPLICATION NUMBER: US/10/247,685  
CURRENT FILING DATE: 2002-09-19  
NUMBER OF SEQ ID NOS: 21  
SOFTWARE: PatentIn version 3.0  
SEQ ID NO 1  
LENGTH: 4192

Run on: November 11, 2005, 20:27:24 ; Search time 194 Seconds

US-10-628-432-32

**Scoring table:**

Searched: 1202784 seqs, 818138359 residues

Maximum DB seq length: 20000000000

```

post-processing: Minimum Match 0%
                  Maximum Match 100%
                  Listing first 45 summaries

```

Command line parameters:

```
-vgaop=7 -vgaopf=6 -vgaopext=0.5 -delext=7  
-dev timeout=120 -warn timeout=30 -threads=1 -vgaopf=6  
-no mmap -largeioevent -neg scores=0 -wait -osblock=100 -loneloc  
-mode-local -outfmt=pct 1.69 @runat 03112005 080226 1415f -ncpu=6 -lcpu=3  
-user=us10628432 @cnc 1.1 @runat 03112005 080226 1415f -ncpu=6 -lcpu=3  
-list=45 -docalgins=200 -thr score=pct -thr max=100 -thr min=0 -allgen=20  
-looperpat=0 -units=bits -start=1 -end=1 -matrx=blobsum62 -trans=humand=0 cdi  
-dbissued/patent NA -qfmt=fastab -suffix=rmi -minmatch=0.1 -loopcf=0  
-vgaop=7 -vgaopf=6 -vgaopext=0.5 -delext=7
```

Database : Issued\_Patents\_NA:\*

```
1: /cgn2_6/prodata/1/ina/5A_COMB.seq.*
2: /cgn2_6/prodata/1/ina/5B_COMB.seq.*
3: /cgn2_6/prodata/1/ina/6A_COMB.seq.*
4: /cgn2_6/prodata/1/ina/6B_COMB.seq.*
5: /cgn2_6/prodata/1/ina/PCTUS_COMB.seq.*
6: /cgn2_6/prodata/1/ina/backfiles1.seq.*
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	2805	98.1	4192	3	US-09-122-1268-1	Sequence 1, Appl.
2	2805	98.1	4192	4	US-09-634-286A-1	Sequence 1, Appl.
3	12805	98.1	4192	4	US-10-247-685-1	Sequence 1, Appl.
4	1193	41.7	4676	4	US-09-130-491-1	Sequence 1, Appl.
5	1189	41.6	3889	4	US-09-568-559-1	Sequence 1, Appl.
6	1180	41.3	4858	3	US-09-992-184-1	Sequence 1, Appl.
7	1097	38.4	2853	4	US-10-009-33-2	Sequence 2, Appl.
8	1055	36.9	3706	3	US-09-484-970B-58	Sequence 58, Appl.
9	1050	36.7	2184	4	US-09-445-023A-13	Sequence 13, Appl.
10	1046.5	36.6	2184	4	US-09-445-023A-2	Sequence 2, Appl.
11	1011.5	35.4	3638	4	US-09-369-364A-8	Sequence 8, Appl.
12	870	30.4	3126	3	US-09-392-184-7	Sequence 7, Appl.

13	837.5	29.3	3002	3	US-09-369-366A-1	Sequence 1, Appl1
14	828	29.0	3250	3	US-09-122-126B-1	Sequence 14, Appl1
15	828	29.0	3250	4	US-09-634-286A-14	Sequence 14, Appl1
16	828	29.0	3250	4	US-10-247-68B-14	Sequence 14, Appl1
17	783.5	27.4	5804	3	US-09-369-366A-12	Sequence 12, Appl1
18	733	26.6	2625	3	US-09-369-366A-14	Sequence 14, Appl1
19	717	25.1	6659	4	US-09-321-987B-1	Sequence 1, Appl1
20	645.5	22.6	3218	3	US-09-369-366A-6	Sequence 6, Appl1
21	643.5	22.5	5357	3	US-09-369-366A-5	Sequence 5, Appl1
22	636	22.2	739	3	US-09-369-366A-10	Sequence 10, Appl1
23	592	20.7	1770	4	US-09-963-791-11	Sequence 11, Appl1
24	592	20.7	1727	4	US-09-963-791-11	Sequence 11, Appl1
25	578.5	20.2	3571	4	US-09-799-451-411	Sequence 411, Appl1
26	574	20.1	3377	4	US-09-981-953A-3	Sequence 3, Appl1
27	570	19.9	703	3	US-09-392-184-6	Sequence 6, Appl1
28	559.5	19.6	1317	4	US-09-963-791-21	Sequence 21, Appl1
29	556.5	19.6	2274	4	US-09-963-791-23	Sequence 23, Appl1
30	556.5	19.5	3766	4	US-09-981-953A-1	Sequence 1, Appl1
31	544.5	19.0	1524	4	US-09-963-791-9	Sequence 9, Appl1
32	515.5	18.0	4042	3	US-10-217-774-5	Sequence 5, Appl1
33	515.5	18.0	4042	3	US-10-217-774-5	Sequence 5, Appl1
34	512	17.9	1071	4	US-09-963-791-19	Sequence 19, Appl1
35	505.5	17.7	3675	3	US-09-930-872-3	Sequence 3, Appl1
36	505.5	17.7	3675	4	US-10-217-774-3	Sequence 3, Appl1
37	486.5	17.0	2450	3	US-09-491-552-2	Sequence 2, Appl1
38	486.5	17.0	6692	3	US-09-491-552-1	Sequence 1, Appl1
39	485.5	17.0	3666	4	US-09-949-016-5530	Sequence 5530, Appl1
40	482.5	16.9	3160	4	US-09-963-791-55	Sequence 25, Appl1
41	479.5	16.8	2450	3	US-09-491-552-9	Sequence 9, Appl1
42	479.5	16.8	4480	3	US-09-491-552-8	Sequence 8, Appl1
43	472	16.5	3885	3	US-09-369-366A-16	Sequence 16, Appl1
44	469.5	16.4	2023	3	US-09-491-552-6	Sequence 6, Appl1
45	468.5	16.4	1701	4	US-09-949-016-1139	Sequence 1139, Appl1

## ALIGNMENTS

RESULT 1  
US-09-122-126B-1  
; Sequence 1, Application US/09122126B  
; Patent No. 6451576

; GENERAL INFORMATION:

1. TITLE OF INVENTION: AGGREGAN DEGRADING METALLO PROTEASES

CURRENT APPLICATION NUMBER: US/09/122,126E

; NUMBER OF SEQ ID NOS: 21

1 DOCUMENT: FACSIMILE VERSION 3.0  
: SEO ID NO 1

LENGTH: 4192  
TYPE: DNA

**ORGANISM:** Homo sapiens

```

; FEATURE:
NAME/VER: 000

```

LOCATION: (406)..(2916

US-09-122-126B-1

**Alignment Scores:**

Score: 2805.00

Best Local Similarity:

```

query match: 98.11%
DB: 3

```

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100  
101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
214  
215  
216  
217  
218  
219  
220  
221  
222  
223  
224  
225  
226  
227  
228  
229  
230  
231  
232  
233  
234  
235  
236  
237  
238  
239  
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
265  
266  
267  
268  
269  
270  
271  
272  
273  
274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300  
301  
302  
303  
304  
305  
306  
307  
308  
309  
310  
311  
312  
313  
314  
315  
316  
317  
318  
319  
320  
321  
322  
323  
324  
325  
326  
327  
328  
329  
330  
331  
332  
333  
334  
335  
336  
337  
338  
339  
340  
341  
342  
343  
344  
345  
346  
347  
348  
349  
350  
351  
352  
353  
354  
355  
356  
357  
358  
359  
360  
361  
362  
363  
364  
365  
366  
367  
368  
369  
370  
371  
372  
373  
374  
375  
376  
377  
378  
379  
380  
381  
382  
383  
384  
385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402  
403  
404  
405  
406  
407  
408  
409  
410  
411  
412  
413  
414  
415  
416  
417  
418  
419  
420  
421  
422  
423  
424  
425  
426  
427  
428  
429  
430  
431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
450  
451  
452  
453  
454  
455  
456  
457  
458  
459  
460  
461  
462  
463  
464  
465  
466  
467  
468  
469  
470  
471  
472  
473  
474  
475  
476  
477  
478  
479  
480  
481  
482  
483  
484  
485  
486  
487  
488  
489  
490  
491  
492  
493  
494  
495  
496  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516  
517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546  
547  
548  
549  
550  
551  
552  
553  
554  
555  
556  
557  
558  
559  
560  
561  
562  
563  
564  
565  
566  
567  
568  
569  
570  
571  
572  
573  
574  
575  
576  
577  
578  
579  
580  
581  
582  
583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602  
603  
604  
605  
606  
607  
608  
609  
610  
611  
612  
613  
614  
615  
616  
617  
618  
619  
620  
621  
622  
623  
624  
625  
626  
627  
628  
629  
630  
631  
632  
633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675  
676  
677  
678  
679  
680  
681  
682  
683  
684  
685  
686  
687  
688  
689  
690  
691  
692  
693  
694  
695  
696  
697  
698  
699  
700  
701  
702  
703  
704  
705  
706  
707  
708  
709  
710  
711  
712  
713  
714  
715  
716  
717  
718  
719  
720  
721  
722  
723  
724  
725  
726  
727  
728  
729  
730  
731  
732  
733  
734  
735  
736  
737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750  
751  
752  
753  
754  
755  
756  
757  
758  
759  
760  
761  
762  
763  
764  
765  
766  
767  
768  
769  
770  
771  
772  
773  
774  
775  
776  
777  
778  
779  
780  
781  
782  
783  
784  
785  
786  
787  
788  
789  
790  
791  
792  
793  
794  
795  
796  
797  
798  
799  
800  
801  
802  
803  
804  
805  
806  
807  
808  
809  
810  
811  
812  
813  
814  
815  
816  
817  
818  
819  
820  
821  
822  
823  
824  
825  
826  
827  
828  
829  
830  
831  
832  
833  
834  
835  
836  
837  
838  
839  
840  
84

2017年12月11日

[illegible]

40 21 GlnProCysLeuLeuLeuProIleValProLeuSerTrpLeuValTrpLeuLeuLeu

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - nucleic search, using frame\_plus\_p2n model

Run on: November 11, 2005, 19:59:59; Search time 555 Seconds

(without alignments)  
5642.420 Million cell updates/sec

Title: US-10-628-432-32

Perfect score: 2859  
Sequence: 1 MSQTGSHPGKGLAGRLMGA.....DQLDFNIPQAVDYKDDDK 529

Scoring table:

BLOSUM62  
Xgapop 10.0 , Xgapext 0.5  
Ygapop 10.0 , Ygapext 0.5  
Fgapop 6.0 , Fgapext 7.0  
Delop 6.0 , Delext 7.0

Searched: 4390206 seqs, 2959870667 residues

Total number of hits satisfying chosen parameters: 8780412

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Command line parameters:

-MODE=frame+ p2n.model -DEV=xlh  
-Q/cgnt\_1/USPTO.spool/US10628432/runat 03112005 080225 14117/app query.fasta\_1.711  
-DB=N Geneseg 16Dec04 -QPM=fastcap -SUFFX=mg -MINMATCH=0.1 -LOOPL=0  
-LOOPEXT=0 -UNITS=bits -START=1 -END=1 -MATRIX=blomsum62 -TRANS=human40.cdi  
-LIST=45 -DOCALLIGN=200 -THR\_SCORE=pct -THR\_MAX=100 -THR\_MIN=0 -ALIGN=20  
-MODE=LOCAL -OUTFMT=pct -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000  
-USER=US10628432 @CGN 1 1 470 @runat 03112005 080225 14117 -NCPU=6 -ICPU=3  
-NO MAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSBLOCK=100 -LONGLOG  
-DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREDS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6  
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : N\_Geneseg\_16Dec04:\*\*

1: geneseg\_16Dec04:\*\*  
2: geneseg\_1990s:\*\*  
3: geneseg\_2000s:\*\*  
4: geneseg\_2001as:\*\*  
5: geneseg\_2001bs:\*\*  
6: geneseg\_2002as:\*\*  
7: geneseg\_2002bs:\*\*  
8: geneseg\_2003as:\*\*  
9: geneseg\_2003bs:\*\*  
10: geneseg\_2003cs:\*\*  
11: geneseg\_2003ds:\*\*  
12: geneseg\_2004as:\*\*  
13: geneseg\_2004bs:\*\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2805	98.1	4192	2	AAx00725
2	2804	98.1	2542	13	ADs20217
3	2801	98.0	1560	10	ADb85506
4	2801	98.0	1725	10	ADb85505
5	2801	98.0	2514	10	ADL13488

6	2801	98.0	4301	4	AA168146	AA168146 Human agg
7	2801	98.0	4301	10	ADL13487	ADL13487 Osteoarthritis
8	2801	98.0	4303	3	AAa95826	AAa95826 Human met
9	2801	98.0	4307	10	ADb85504	ADb85504 Human agg
10	2801	98.0	4307	10	ACF63399	ACF63399 Human Adh
11	2801	98.0	4307	13	ADs20212	ADs20212 Human Adh
12	2798	97.9	4406	4	AAa46100	AAa46100 Human DNA
13	2798	97.9	4407	3	AAa37111	AAa37111 Human DNA
14	2798	97.9	4407	4	AAa54426	AAa54426 Human PRO
15	2798	97.9	4407	8	ACa89550	ACa89550 CDNA enco
16	2798	97.9	4407	8	ACa73560	ACa73560 CDNA enco
17	2798	97.9	4407	8	ACa05875	ACa05875 Human sec
18	2798	97.9	4407	8	ACa66709	ACa66709 CDNA enco
19	2798	97.9	4407	8	ACF19670	ACF19670 Human sec
20	2798	97.9	4407	8	ACF19670	ACF19670 Human sec
21	2798	97.9	4407	8	ACD21958	ACD21958 Human sec
22	2798	97.9	4407	8	ACF13123	ACF13123 Human sec
23	2798	97.9	4407	8	ACD25226	ACD25226 Human sec
24	2798	97.9	4407	8	ACF00275	ACF00275 Human sec
25	2798	97.9	4407	8	ACa72332	ACa72332 Human sec
26	2798	97.9	4407	8	ACD04856	ACD04856 Human sec
27	2798	97.9	4407	8	ACD18317	ACD18317 Human sec
28	2798	97.9	4407	8	ACD08324	ACD08324 Human sec
29	2798	97.9	4407	8	ACa88758	ACa88758 Human sec
30	2798	97.9	4407	8	ACa70200	ACa70200 Human sec
31	2798	97.9	4407	8	ACD12422	ACD12422 Human sec
32	2798	97.9	4407	8	ACD74337	ACD74337 Human sec
33	2798	97.9	4407	8	ACD15965	ACD15965 Human sec
34	2798	97.9	4407	8	ACD25533	ACD25533 Human sec
35	2798	97.9	4407	8	ACD18010	ACD18010 Human sec
36	2798	97.9	4407	8	ACD88297	ACD88297 Human sec
37	2798	97.9	4407	8	ACD21651	ACD21651 Human sec
38	2798	97.9	4407	8	ACD18718	ACD18718 Human sec
39	2798	97.9	4407	8	ABX98328	ABX98328 Human sec
40	2798	97.9	4407	8	ACD14079	ACD14079 Human PRO
41	2798	97.9	4407	8	ACD09859	ACD09859 Human sec
42	2798	97.9	4407	8	ACD88604	ACD88604 Human sec
43	2798	97.9	4407	8	ACD21344	ACD21344 Human sec
44	2798	97.9	4407	8	ABX75716	ABX75716 Human sec
45	2798	97.9	4407	8	ABX97919	ABX97919 Human PRO

## ALIGNMENTS

RESULT 1	AAx00725	standard; cDNA to mRNA; 4192 BP.
ID	AAx00725	standard; cDNA to mRNA; 4192 BP.
XX	AAx00725;	
AC	AAx00725;	
XX	AAx00725;	
DT	30-MAR-1999	(first entry)
XX	30-MAR-1999	(first entry)
DE	Human aggrecan degrading metalloprotease 1 gene.	
XX	Human aggrecan degrading metalloprotease 1 gene.	
KW	Human; aggrecan degrading metalloprotease; cartilage; proteoglycan;	
KW	interglobular domain; matrix metalloprotease; bovine; interleukin-1beta;	
KW	primer; PCR; amplification; inhibitor; cleavage; inhibitor; ADMP; ss;	
KW	arthritis; joint injury; pseudogout.	
XX	arthritis; joint injury; pseudogout.	
OS	Homo sapiens.	
XX	Homo sapiens.	
PH	Key	Location/Qualifiers
FT	CDS	406..2919
FT		/*tag= a
FT		/product= "ADMP-1"
FT		/note= "aggrecan degrading metalloprotease 1"
XX	MO9905291-A2.	
XX	04-FEB-1999.	
XX	04-FEB-1999.	
XX	24-JUL-1998;	98WO-US015438.
XX	24-JUL-1998;	98WO-US015438.

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - nucleic search, using frame\_plus\_p2n model

Run on: November 11, 2005, 20:15:59 ; Search time 4498 Seconds

(without alignments)  
5698.713 Million cell updates/sec

Title: US-10-628-432-32

Perfect score: 2859

Sequence: 1 MSQTSHPGRGLAGRWLWCA.....DQLQDPNIPQAVDYKDDDDK 529

Scoring table:

BLOSUM62  
Xgapop 10.0, Xgapext 0.5  
Ygapop 10.0, Ygapext 0.5  
Fgapop 6.0, Fgapext 7.0  
Delop 6.0, Delext 7.0

Searched: 4708233 segs, 24227607955 residues

Total number of hits satisfying chosen parameters: 9416466

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%  
Listing first 45 summaries

Command line parameters:

-MODEL=frame+ p2n.model -DEV=xlh  
-Q=/cgm2\_1/USPFO.epool/US10628432/runat\_03112005\_080225\_14127/app.query.fasta\_1.711  
-DB=genEmbl -QMT=faeCap -SUFFIX=rge -MINMATCH=0.1 -LOOBCl=0 -LOOBCExt=0  
-UNITS=bits -START=1 -END=-1 -MATRIX=blomsum62 -TRANS=human40.cdi -LIST=45  
-DOCALLIGN=200 -THR SCORE=500 -THR MAX=100 -THR MIN=0 -ALIGN=20 -MODE=LOCAL  
-OUTFMT=ptc -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000  
-USBR=US10628432 @CGN 1.1 3552 @runat\_03112005\_080225\_14127 -NCPU=6 -ICPU=3  
-NO MMAP -LARGEOUTRY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG  
-DET TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6  
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :

GenEmbl:\*  
1: gb ba:\*  
2: gb hg:\*  
3: gb in:\*  
4: gb om:\*  
5: gb ov:\*  
6: gb pac:\*  
7: gb pm:\*  
8: gb pl:\*  
9: gb pr:\*  
10: gb ro:\*  
11: gb sts:\*  
12: gb sy:\*  
13: gb un:\*  
14: gb vl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2805	98.1	4192	6	AR230264
2	2805	98.1	4192	6	AR282324
3	2805	98.1	4192	6	AR560177
4	2805	98.1	4192	6	BD073443

5	2805	98.1	4193	9	AF148213
6	2801	98.0	4301	6	BD016729
7	2801	98.0	4301	6	AB014588
8	2798	97.9	4407	6	AX376284
9	2798	97.9	4407	6	AX597248
10	2798	97.9	4407	9	AY358886
11	2790	97.6	4341	9	BC063293
12	2777	97.1	4217	6	CQ716637
13	2557	89.4	3720	4	AF516915
14	2459	86.0	3321	10	BC027773
15	2427.5	84.9	4281	10	AK172001
16	2170	75.9	167863	2	AL590651
17	2151.5	75.3	133512	9	AL590651
18	2147.5	75.1	10766	9	AY044847
19	1830	64.0	1991	9	BC030812
20	1655.5	57.9	221776	10	AC084821
21	1655.5	57.9	221776	2	AC093409
22	1593	55.7	1251	10	AB042271
23	1593	55.7	1878	6	BD094440
24	1593	55.7	1878	6	BD129556
25	1593	55.7	1878	6	BD129556
26	1593	55.7	1878	6	BD129556
27	1593	55.7	1878	6	BD129556
28	1593	55.7	1878	6	BD129556
29	1593	55.7	1878	6	BD129556
30	1593	55.7	1878	6	BD129556
31	1593	55.7	1878	6	BD129556
32	1593	55.7	1878	6	BD129556
33	1593	55.7	1878	6	BD129556
34	1593	55.7	1878	6	BD129556
35	1593	55.7	1878	6	BD129556
36	1593	55.7	1878	6	BD129556
37	1593	55.7	1878	6	BD129556
38	1593	55.7	1878	6	BD129556
39	1593	55.7	1878	6	BD129556
40	1593	55.7	1878	6	BD129556
41	1593	55.7	1878	6	BD129556
42	1593	55.7	1878	6	BD129556
43	1593	55.7	1878	6	BD129556
44	1593	55.7	1878	6	BD129556
45	1593	55.7	1878	6	BD129556

## ALIGNMENTS

RESULT 1	AR230264	Sequence 1 from patent US 6451575.	4192 bp	DNA	Linear	PAT 20-DEC-2002
LOCUS	AR230264	Sequence 1 from patent US 6451575.	4192 bp	DNA	Linear	PAT 20-DEC-2002
DEFINITION	AR230264	Sequence 1 from patent US 6451575.	4192 bp	DNA	Linear	PAT 20-DEC-2002
ACCESSION	AR230264	Sequence 1 from patent US 6451575.	4192 bp	DNA	Linear	PAT 20-DEC-2002
VERSION	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
KEYWORDS	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
SOURCE	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
ORGANISM	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
REFERENCE	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
AUTHORS	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
TITLE	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
JOURNAL	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
FEATURES	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
source	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002

ORIGIN	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
Alignment Scores:	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
Pred. No.:	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
Score:	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
Percent Similarity:	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
Best Local Similarity:	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
Query Match:	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002

Alignment Scores:	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
Pred. No.:	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
Score:	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
Percent Similarity:	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
Best Local Similarity:	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002
Query Match:	AR230264.1	GI:27270379	4192 bp	DNA	Linear	PAT 20-DEC-2002